

COPY OF THE EXACT ENGLISH LANGUAGE TRANSLATION OF ANNEXES

manufacturing cost, all while conferring an increased safety for the user when he uses the machine.

These goals are reached with a coffee-maker able to function with cartridges, comprising a case for reception of means for supplying hot water to an infusion head in two parts: a fixed part forming a support for at least one cartridge and a movable part to open and close said infusion head, the two parts being maintained spaced apart by first elastic restoring means, a locking device to maintain the infusion head closed in opposition to said restoring means and means for adjusting the infusion parameters adapted to emit at least one signal representative of the operating condition of the machine, by the fact that, in operation, the locking device is blocked in a manner to prevent opening of the movable part of the infusion chamber and that it has means for controlling the opening of said locking device at the end of a signal emitted by said adjusting means.

Thus, the two parts of the infusion head are in a normally open position while being maintained spaced apart by first restoring means. These restoring means are, for example, one or more torsion or tension springs, etc, mounted between the two parts of the infusion head.

The closing of the infusion head is done at the beginning of an infusion cycle, after the introduction of the cartridges inside the housing provided for this purpose in the infusion head. This closing can be realized manually by the user or automatically by a mechanism for driving the movable part. Ar infusion cycle is started thereafter, this infusion cycle being characterized by certain operating parameters: temperature, time, intensity of the current absorbed by the

CLAIMS

- 1. Coffee-maker able to function with cartridges, comprising a case (1) for reception of means for supplying hot water to an infusion head (8) in two parts: a fixed part forming a support for at least one cartridge (2) and a movable part to open and close said infusion head (8), the two parts being maintained spaced apart by first elastic restoring means (14), a locking device (24) to maintain the infusion head (8) closed in opposition to said restoring means and means for adjusting the infusion parameters adapted to emit at least one signal representative of the operating condition of the machine, characterized in that, in operation, the locking device is blocked in a manner to prevent opening of the movable part of the infusion chamber and that it has means for controlling the opening of said locking device at the end of a signal emitted by said adjusting means.
- 2. Coffee-maker according to claim 1, characterized in that said locking device (24) has a locking part (25) movable between a locked position and an unlocked position by being actuated by an electromagnet (30) controlled by said means for controlling.
- 3. Coffee-maker according to one of the claims 1 or 2, characterized in that the movable part of the infusion head is a jaw (15) pivotably mounted with respect to a pivot axis (16) of the case and said locking device (24) has a movable locking part (25) pivotable around an axis (27) parallel to the pivot axis (16) of said jaw.

- 4. Coffee-maker according to one of the claims 2 or 3, characterized in that said locking device (24) has second elastic restoring means for returning said locking part (25) to the locked position.
- 5. Coffee-maker according to one of claims 3 to 4, characterized in that said locking part (25) comprises, in a plane perpendicular to its pivot axis (27), at a high part, a hook (26) cooperating with a locking pin (22) of the jaw (15), said hook (26) being prolonged downwards by a lever arm (29) intended to be actuated by said electromagnet (30).
- 6. Coffee-maker according to claim 5, characterized in that said locking part (25) comprises, at the external side of its pivot axis (27), a projecting part forming an operating button (33).
- 7. Coffee-maker according to one of the claims 5 or 6, characterized in that said lever arm (29) cooperates with a rod (31) crossing the width of the infusion head (8), said rod (31) cooperating at its end (32) with said electromagnet (30).
- 8. Coffee-maker according to one of the preceding claims, characterized in that said control means for said locking device (24) comprise a microcontroller connected to the means for adjusting the infusion parameters to control said electromagnet (30) as a function of said infusion parameters.
- 9. Coffee-maker according to claim 8, characterized in that said microcontroller is connected to at least one sensor representative of the state of an infusion parameter and it

manages an infusion cycle according to the evolution of this parameter.

- 10. Coffee-maker according to one of the claims 8 or 9, characterized in that it comprises an electrical contact actuated by the opening of said jaw and connected to said microcontroller to enable it to detect the open or closed position of the jaw.
- 11. Coffee-maker according to one of claims 8 to 10, characterized in that said microcontroller is connected to a sensor of a critical situation which controls the opening of said jaw when a limit condition of this parameter has been reached.